

Knowledge and Attitudes toward Perceived Causes of Infertility and Adoption of Child among Infertile Couples: A Cross-sectional Descriptive Study

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Abstract

Objective: To investigate the knowledge and attitudes toward perceived causes of infertility and adoption of child among infertile couples in Pakistan.

Study type settings & duration: This cross sectional descriptive study was conducted at public & private hospitals and private clinics in Lahore, from December 2009 to April 2010.

Methodology: A total of 100 infertile couples (20 to 55 years), diagnosed with primary or secondary infertility were recruited via purposive sampling from public and private hospitals and clinics of Lahore. Interview was used for the evaluation of knowledge and attitudes toward perceived causes of infertility and adoption of child among infertile couples.

Results: About 40.68% couples reported that the cause of infertility was related to be problems in husband. The reasons were low sperm count, lack of sexual desire, and erectile dysfunction. The highest percentage of couples, 69.51% mentioned that infertility was due to problem within female. The reasons given were irregular menstrual cycle, late age marriage of wife, and psychological sufferings (stress, anxiety, and depression). 40.24% mentioned the cause as unexplained/ idiopathic although they were seeking treatment from infertility clinics whereas 32.92% was of those couples who reported the reason of infertility as problem within both husband and wife. 77% women showed interest in adoption of child.

Conclusion: Men and women should be provided with adequate information on infertility and the need for both partners to seek treatment. The need is to create awareness among common masses in general and infertile couples in particular that it is not only the woman who is responsible for couple's infertility, male infertility can also account for couples' failure to conceive.

Key words: Infertility, idiopathic, adoption.

Introduction

The World Health Organization (WHO) defines infertility as a reproductive disease that commonly involves difficulties to conceive.

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Authors Contribution

HS, AK & SY conceptualized the project. HS also did the data collection and statistical analysis. Literature search was done by SY. AK & SY did the drafting, revision & writing of manuscript

Conception does not occur even after one year of unprotected regular sexual intercourse.¹ It was estimated that one out of ten couples suffer from infertility that is either primary or secondary. The prevalence of infertility in Pakistan is 21.9% in which majority suffers from secondary infertility.² Secondary infertility is defined as inability of a woman to give birth to a child either because of the inability to become pregnant or the inability to give birth to a baby following either a previous ability to carry a pregnancy to a live birth.³ Inability to conceive is experienced by couples as highly stressful and often heartbreaking that compelled researchers to study the underlying causal factors of infertility.^{4,5}

About 40 % of infertility is chiefly attributed to female factors (for instance, endometriosis, tubal factors) and 40% is attributable to male factors (e.g.,

impotence, low sperm count) as per medical studies.⁶ 20% infertility issues are caused by interactional factors and 5-10% is neither attributable to male partner nor female partner. Such kind of infertility is called as "idiopathic", "unexplained", or "normal" infertility.⁷ Infertility in women is due to three biological causes; lack of production and release of mature eggs, interference of scarring or adhesions with the fallopian tubes, and hormonal problems that may result in the fertilized egg being unable to properly implant in the uterine lining.^{3,8} Whereas in men, low sperm viability, impotency, erection problems, masturbation, small penis, too many sexual partners, dysfunction of sperm motility, and glandular disorder, are most common causes. Perceived causes of infertility and cultural significance of reproduction are the causes of choosing any infertility treatment.⁹

In the present study, it has been anticipated that the acceptance, feasibility, and need of adoption act as a treatment option for sterile couples. Since, treatment of infertility is expensive, time consuming, and emotionally draining therefore, sterile couples choose adoption of child as better option. Adoption can be described as the process in which an adopted child becomes the legitimate child of the adoptive parents with all privileges, rights, and responsibilities that are devoted to the relationship and is perpetually detached from the biological parents.¹⁰

In Islamic religion, the common term for adoption is *kafala* which means "to feed"¹¹ and it explains the valuable relationship between adopted child and parents. The element of stigma attached to infertility and the lower rate of reporting of adoptions in Pakistan intrigued the researchers to investigate this issue. In addition, least number of researches have been conducted on infertile couples to date and that too focused mainly on the infertility of women. That is why it is of particular importance that both members of the couple participate in the study. Hence, the objective of the present research was to explore the knowledge and attitudes toward perceived causes of infertility and adoption among infertile couples.

Methodology

We undertook a cross-sectional study from December 2009 to April 2010. The study consisted of 100 infertile couples who were under treatment at some public or private hospital or specialized infertility clinics in Lahore, Pakistan. The sample's inclusion criteria were that either of the husband or wife diagnosed with secondary or primary infertility,

unable to achieve pregnancy even after two years of adequately timed and unprotected sexual intercourse. Convenient sampling was used for selection of couple with either type of infertility. Interviews of husbands and wives were separately conducted so that they could openly talk about their feelings with surety that neither husband nor wife could hear each other's responses.

A personal bio-data form was given to the participants that contained demographic information related to research relevant variables i.e., education, age, years of marriage, type of infertility etc. The objectives of study were briefed to the participants and consent was taken from them. After informed consent, these couples were interviewed regarding their knowledge and attitudes toward perceived causes of infertility and adoption of child. As infertility is a sensitive topic especially in Pakistan, people are reluctant to share their true responses regarding infertility causes. Keeping in view the sensitivity of topic, husbands and wives answered the questions separately in the waiting room, before their medical appointment. Husbands and wives who gave same type of responses and revealed same causes of infertility show that how much they are honest and true in responding. Whereas husbands and wives who provided contradictory reasons from one another showed that they gave different causes of infertility. The major problem that the researcher faced while collecting data was that some women got emotional while giving interviews and started weeping. There, they were counseled by the researcher in order to bring them to their normal state prior to the interview. Despite all the difficulties, the total sample included 100 infertile couples seeking treatment for infertility from public and different private infertility centers of Lahore.

For categorical variables, (for instance, age, gender, no. of doctors consulted, length of treatment etc.) frequencies were calculated. Frequencies and percentages were also calculated for similar and different responses of husbands and wives on perceived causes of infertility to meet objectives of the study. To assess the preference of adoption of child among infertile couples, chi-square statistics was calculated at p -value of $<.001$.

The ethical approval was taken from the Institutional Ethical Committee of Quaid-i-Azam University, Islamabad.

Results

Out of the total 100 infertile couples (wives, $n = 100$ and husband, $n = 100$), 72 couples were facing primary infertility and 28 couples were suffering from secondary infertility.

Table 1: General characteristics of the study participants.

Variables	Husbands (n = 100)		Wives (n = 100)	
	F	%	F	%
Age				
20-30 years	36	36	67	67
31-40 years	52	52	29	29
41 and above	12	12	4	4
Education				
Primary to Matric	27	27	29	29
Intermediate and Graduation	45	45	55	55
Masters and above	28	28	16	16
Consultation other than doctor				
Yes	43	43	65	65
No	57	57	35	35
Thought of adoption				
Yes	10	10	33	33
No	90	90	67	67
No of doctors consulted by infertile couples				
1	30	30		
2	24	24		
3	8	8		
More than 3	38	38		
Length of treatment (in months)				
Upto 15	33	33		
16-30	28	28		
31-45	4	4		
46-60	16	16		
60 and above	19	19		
Years of marriage				
2-4	52	52		
5-7	24	24		
8-10	13	13		
11 and above	11	11		
Time trying to conceive (in years)				
2-4	55	55		
5-7	23	23		
8-10	13	13		
11 and above	9	9		

Majority (58%) had graduation level education. Table-1 shows the demographic variables according to age, education, professional status, family income, no of doctors consulted etc. Husbands and wives' age ranged from 24 years to 55 years (M = 33.55, SD = 5.84) and 20 – 50 years (M = 29.71, SD = 5.64) respectively. The couples had been married 5.86 years (SD = 4.25), on average (ranging from 2 years to 21 years). The time period (after marriage) couples took trying to conceive a child was 5.54 years (SD = 3.99), ranging from 1 year to 21 years and the average time in treatment was 41.65 months (3.5 years; SD = 44.74), ranging from 2 months to 216 months. Majority of couples (73%) were from joint whereas

27% lived in a nuclear family system. More than three doctors have been consulted by majority of the couples (38%) for the treatment of infertility problems. Among 100 infertile couples, 43% husbands and 65% wives reported to have consulted others including Hakeems, Spiritual healers, and Dais.

Table-2 presents frequencies and percentages of couples reporting the different causes of infertility. It indicates that of total 41 couples, 40.68% described the reason to be the problem with husband, for instance, difficulty with ejaculation, reduced sexual desire, difficulty maintaining an erection (erectile dysfunction), and low sperm count. The highest percentage of couples (69.51%) mentioned the cause as problem with wife. The underlying reasons were irregular menstrual cycle, late age marriage of wife, psychological problems with wife including depression, anxiety, and stress. 40.24% described the reason as unexplained/ idiopathic whereas the lowest percentage was of those couples who reported the cause of infertility as medical problems in both husband and wife.

Table 2: Status of causes of infertility reported by infertile couple.

Causes of infertility given by husbands (n = 41) and Wives (n = 41)		F	%
Male infertility problems	Difficulty with ejaculation	6	7.31
	Reduced Sexual desire	5	6.09
	Difficulty maintaining an erection (erectile dysfunction)	8	9.75
	Low sperm count	5	6.09
Total responses		24	40.68
Female infertility problems	Irregular menstrual cycle in wives	16	19.51
	Late age marriage of wife	24	29.26
	Psychological problems with wife including depression, anxiety, and stress	17	20.73
	Unexplained/ idiopathic causes	33	40.24
Total responses		57	69.51
Infertility problems in both husband and wife		27	32.92

Table-3 exhibits the proportional difference between husbands and wives of infertile couples on preference of adoption. It is evident from the table that there are significant differences on preference of adoption among husbands and wives at $p < .001$.

Wives tend to prefer adoption of a child more as compared to husband.

Table 3: Status of preferences for adoption of a child among husband and wives.

Preference for Adoption	Gender		Chi-square (χ^2)	p-value <.001
	Husband (n= 100)	Wife (n = 100)		
Yes	10(23%)	33(77%)	15.67	<.001
No	90 (57%)	67(43%)		

Discussion

The present study purports to investigate the knowledge and attitudes toward perceived causes of infertility and adoption of child among infertile couples. According to this study male infertility problems have been reported to be the cause of infertility by 40.68% couples while 69.51% mentioned that it was because of female infertility. A combination of both unexplained/idiopathic reasons of infertility was given by 40.24 % couples while 32.92 % couples think that the cause of infertility lies in the medical issues with both husband and wife. On the contrary, a research report on causes of infertility found that 21.91% cases were attributable to male factor and the remaining percentage was attributed to medical causes.¹²

Probably, there is a game going on between the partners. The frequencies and percentages of husbands and wives' responses regarding perceived cause of infertility belonging to the group reporting 'different causes of infertility' presents clear picture about 'who is blaming whom.' The results indicate that majority of wives explained the cause as female medical problems. Wives seemed to demonstrate self-blaming. These findings are compatible with previous study that found that women compared to men feel more responsible for infertility problem and its treatment. Women experienced more self-blame and guilt even when the cause of infertility was attributed to male factors.¹³ It could be explained by the fact that in traditional countries, the ideal of women is motherhood.¹⁴ Moreover, whichever partner is actually infertile, most of the tests and treatments focus on woman's body. Thus, infertile women feel both responsible for the infertility and in control of the situation.¹⁵ On the other hand, the husbands' tendency to blame their wives for infertility depict that false beliefs are prevalent in our culture that only female is responsible for childbirth and men have the option of second marriage in case of inability of their wives to get pregnant. Another

possible reason could be that higher levels of stigmatization are associated with male infertility as compared to female infertility. Traditionally, it is viewed that man has the power to make his wife pregnant and then to undertake the fathers' role for his children. This appears to be articulated in an underlying assumption of society that sterility is a danger to masculinity or to male sexuality.^{16,17} Probably, the stigma associated with infertility is the reason that men hardly agree to self-investigation for infertility in male dominated societies and this leads to development of psychological problems in women.¹⁸

Gender differences in the preference for adoption was supported as the results of chi square test indicated that more interest was shown by the wives in adopting a child than husbands which is consistent with previous research that found that men held less favorable attitudes towards adoption than women did.¹⁹ The relatively higher trend of wives towards adoption as compared to their partners could be explained by the fact that women have greater need to satisfy their feminine nature. Whereas men seemed to be more reluctant to start the adoption process and showed more concern about having hereditary links to their successors. The well-established fact about women is that they view motherhood role as more important factor of their femininity whereas men view their fatherhood role as one significant symbol of their masculinity.¹⁹

Although wives seemed to show more preference for adoption than their partners but the results indicate that overall, among wives, less than half of the respondents (33%) whereas among husbands, only small proportion of respondents (10%) reported to ever having thought of adopting a child. Thus, it shows that adoption was seldom an option for infertile couples irrespective of duration of infertility period. A study conducted in Pakistan to explore the perceptions of couples with secondary infertility regarding adoption demonstrated similar findings.²⁰ Several reasons for adoption being a less desirable option for infertile couples could be given. The major reasons could be that adoption is a long and complicated process, the fear of non- fulfillment of legal requirements,²¹ and that adopted child will not be treated with affection, love and care that parents feel for their own biological children.²² The religious context provides another plausible reason as the scriptures of Islam does not allow legal adoption of child as it is known in the western world but does allow the kind fostering of orphans.

Findings of the study have implications for social workers, counselors, and clinical practitioners. As, it is predicted that the prevalence of infertility is on the rise therefore, programs should

focus on prevention of infertility rather than on offering high technology treatments to infertile couples. The findings can increase counselor's awareness for designing effective counseling interventions and provide adequate knowledge according to the needs of this population. Men and women should be provided with adequate information on infertility and the need for both the partners to seek treatment. The need is to create awareness among common masses in general and infertile couples in particular that it is not only the woman who is responsible for a couple's infertility, male infertility can also account for couples' failure to conceive.

The limitations are that sample was not truly representative of infertile population of Pakistan as it was taken from only one city, Lahore. Further, a discrete attitude and general reservation was obvious due to stigma attached with childlessness which was not explored. Hence, the assessment of true responses was inevitable because of social desirability.

The study found that majority of couples described that problems in the wife was the main cause of infertility. Some proportion of couples also considered unexplained/ idiopathic as cause of infertility whereas the lowest percentage reported that the cause of infertility was due to problems in both male and female. Furthermore, unlike husbands, wives tend to prefer adoption. Longitudinal studies with sound empirical methodologies examining attitudes towards adoption and marital adjustment of infertile couples during and after treatment are strongly recommended.

Conflict of interest: None declared.

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